

History

A California Water Chronology, <i>Staff</i>	3
Update of the California Water Plan, <i>Staff</i>	5

A California Water Chronology

In 2000, California celebrated its sesquicentennial (150 years of statehood). Within this relatively short time period, the State's major water infrastructure and complex institutional framework for managing water were developed. The following chronology highlights some key points in California's water history.

- 1848 Treaty of Guadalupe Hidalgo transfers California from Mexico to the U.S.
- 1848 Gold is discovered at Sutter's Mill on the American River.
- 1850 California is admitted to the Union.
- 1871 First reported construction of a dam on Lake Tahoe.
- 1884 Hydraulic mining is banned because of its impacts on navigation and contribution to flooding.
- 1886 *Lux v. Haggin* addresses competing water rights doctrines of riparianism and prior appropriation.
- 1887 Legislature enacts Wright Irrigation District Act, allowing creation of special districts.
- 1887 Turlock Irrigation District becomes first irrigation district formed under the Wright Act.
- 1895 World's first long-distance transmission of electric power (22 miles), from a 3,000 kW hydropower plant at Folsom to Sacramento.
- 1902 Congress enacts the Reclamation Act of 1902, creating the Reclamation Service, and authorizing federal construction of water projects.
- 1905 Salton Sea is created when the Colorado River breaches an irrigation canal and flows into the Salton Trough.
- 1913 First barrel of Los Angeles Aqueduct completed.
- 1914 California's present system of administering appropriative water rights is established by the Water Commission Act.
- 1922 Colorado River Compact signed.
- 1928 California Constitution amended to prohibit waste of water and to require reasonable beneficial use.
- 1928 Saint Francis Dam fails.
- 1929 State dam safety program goes into effect.
- 1929 East Bay MUD's Mokelumne River Aqueduct is completed.
- 1934 San Francisco's Hetch Hetchy Aqueduct is completed.
- 1940 All American Canal is completed.
- 1941 Colorado River Aqueduct is completed.
- 1945 Shasta Dam is completed.
- 1957 The Department publishes Bulletin 3, the California Water Plan.
- 1960 California voters approve the Burns-Porter Act, authorizing the sale of bonds to finance State Water Project construction.
- 1968 Oroville Dam is completed.
- 1968 Congress enacts National Wild and Scenic Rivers Act.
- 1969 Legislature enacts Porter-Cologne Act, the foundation of California water quality regulatory programs.
- 1969 Congress enacts National Environmental Policy Act.
- 1970 Legislature enacts California Environmental Quality Act.
- 1972 Legislature enacts California Wild and Scenic Rivers Act.
- 1973 California Aqueduct is completed.
- 1978 *California v. U.S.* held that the U.S. must obtain water rights under State law for reclamation projects, absent clear congressional direction to the contrary.

- 1978 SWRCB issues Decision 1485, requiring the CVP and SWP to meet specified Bay-Delta operating criteria.
- 1983 National Audubon Society v. Superior Court sets forth the application of public trust concepts to water rights administered by SWRCB.
- 1990 Congress enacts the Truckee-Carson-Pyramid Lake Water Rights Settlement Act (PL 101-618).
- 1992 Congress enacts the Central Valley Project Improvement Act (PL 102-575).
- 1994 SWRCB issues Decision 1631, requiring specified protections for Mono Lake levels.
- 1994 Bay-Delta Accord signed; its original three-year term extended to a total of four years.
- 1995 CALFED Bay-Delta Program to develop a comprehensive, long-term program for environmental protection of the Bay-Delta System and Water Supply and reliability for all water users. CALFED was charged with planning, selecting, and implementing this long-term solution.
- 1996 Monterey Amendments litigation filed against DWR. (Planning and Conservation League vs. Department of Water Resources and Central Coast Water Authority)
- 1997 Silverwood Lake celebrates Grand Reopening after the completion of new intake structure.
- 1998
- 1999
- 2000 CALFED publishes Programmatic Record of Decision
DWR begins collaborative, strategic planning process for *California Water Plan Update 2003*
- 2001
- 2002 Statement of principles for settlement of the Monterey Amendments litigation.
DWR seeks new license from Federal Energy Regulatory Commission to operate Oroville Facilities (FERC Project No. 2100) in Butte County.
- 2003 Inaugural meeting of the California Bay-Delta Authority, formerly known as CALFED. CBDA specifically is charged with ensuring balanced implementation of the CALFED Record of Decision.
Colorado River Quantification Settlement Agreement and Salton Sea ecosystem restoration legislation create new responsibilities for the Resources Agency and for the Departments of Fish and Game and Water Resources.
- 2004

Update of the California Water Plan

The California Water Plan (1957)

The California Water Plan was the final of a series of three bulletins setting forth the results of statewide water resources investigations which had begun in 1947. Bulletin No. 3 described a comprehensive master plan for the control, protection, conservation, distribution, and utilization of the waters of California, to meet present and future needs for all beneficial uses and purposes in all areas of the State to the maximum feasible extent. It was an ultimate plan that indicated the general manner in which California's water resources should be developed to satisfy the potential ultimate water requirements of the State. It did not give consideration to time or economics, either in staging of projects or in the growth of demand for water and associated services. It was to be regarded as a broad and flexible pattern into which future definite projects may be integrated in an orderly fashion. Additional data and experience not foreseen in 1957 would substantially alter and improve The California Water Plan. The basic concept of the Plan as a master plan to meet the ultimate requirements for water at some unspecified but distant time in the future, when the land and other resources of California have essentially reached a state of complete development, would remain unchanged. It was to be implemented by a statewide program for the construction of projects needed to control and supply water wherever and whenever the need arises and as projects are found feasible. The job would require the combined efforts of the federal government, state government and local agencies, as well as private entities and individuals, with the State taking a leading role in administration and coordination as well as financing and construction. The base year for Bulletin No. 3 was 1950.

Statewide planning studies to update the California Water Plan have continued since 1961, and have incorporated economic considerations. Results of the studies have been presented in the Bulletin 160 series of reports.

Implementation of the California Water Plan (1966)

The first of the Bulletin 160 series, Bulletin No. 160-66 reported on studies conducted within the framework of The California Water Plan, and outlined the manner by which progress should be made from the present (1960) to the stage of development that would meet the State's 2020 demands. It included the best available information on water demand forecasts throughout the State and on economic considerations involved in the staging of water supply and delivery projects. It identified some of the more favorable projects and presented a schedule for the staging of those projects to meet the increasing water demands. Bulletin No. 160-66 was neither an alternative nor a replacement of Bulletin 3, but rather a proposed pattern for implementation of specific parts of The California Water Plan, as set forth by the California Water Code.

Some water policy concerns discussed included flood control and floodplain management, power demands, water-related recreation, the relationship of fish and wildlife to water development, and water quality.

Water for California: The California Water Plan; Outlook in 1970

By 1967 California's population had grown to 19 million, but the rate of growth had slowed from that of the 1950s. In this Bulletin No. 160-70 population projections for 1990 and 2020 were reduced. Irrigated acreage estimates were also reduced, and more accurate information on the consumptive use of crops and the extent of water reuse was available. With projects then under construction or authorized, the report concluded that sufficient water supplies would be available to meet most of the 1990 requirements. The report concluded that the projected slower population growth, together with additional water supplies under development or authorized, would provide a breathing spell that would allow more time " . . . to consider alternative sources of water supply and develop policies for the maximum protection of the environment." The trend toward increasing environmental awareness was noted for both the national and State levels.

The California Water Plan: Outlook in 1974

By 1972, the base year for Bulletin 160-74, the State's population had reached about 21 million, indicating a continuing slowdown in the rate of growth. Population projections were again revised downward for 2990 and 2020 to 27 million and 37 million, respectively. This report concluded that the status of available supplies, compared to the (then) present use, was favorable. This was based on the premise that the Auburn, New Melones, and Warm Springs Reservoirs and the Peripheral Canal would be operational by 1980. But it was less conclusive about the extent to which supplies would satisfy future needs, considering new California legislation for wild and scenic rivers, primarily on the North Coast. Key water policy issues discussed were cooling water for electric energy production, water deficiencies (risk), water exchanges, public interest in agricultural drainage (San Joaquin Drain), water use efficiency (water conservation), economic efficiency (water transfers), and waste water reclamation.

This issue of the Bulletin 160 series departed from the earlier practice of a single forecast of future water use by presenting four different scenarios as to future conditions and events that affect water use.

The California Water Plan:

Projected Use and Available Water Supplies to 2010 (1983)

Bulletin 160-83 presented some of the alternative sources of supplies or potential shortages associated with future uses to 2010. More a technical report than previous editions, part of the process included the development of agricultural models applied for the first time. These were used in assessing the general economic effects of increasing water and energy costs. The report quantified the effect of urban and agricultural water conservation measures and the potential for water reclamation as a means of reducing water needs. A number of non-structural options for making more effective use of water supplies were proposed for further consideration.

California Water: Looking to the Future (1987)

Looking back to the previous four reports in the Bulletin 160 series, Bulletin 160-87 described them as technical examinations of the then-current water supplies and water demand for coming decades. The

1987 report took a broad view of water events and issues in California, and examined how California can continue to meet the water needs of a continually growing population. The report also discussed several leading water management concerns including water quality, the Sacramento-San Joaquin Delta, and evolving water policies over a wide range. One of its main conclusions was that in roughly three out of four years, California's natural water resources, including rights to the Colorado River, were sufficient to meet all of its water needs for the foreseeable future.

California Water Plan Update: Bulletin 160-93 (1994)

More than 35 years after the first California water Plan was published, this report discussed how population growth, land use, and water allocations for the environment were affecting water resource management. The bulletin discussed the effects of more stringent water quality standards, the Endangered Species Acts, the Central Valley Project Improvement Act of 1992, and efforts to solve problems in the San Francisco Bay-Sacramento-San Joaquin River Delta estuary. It differed from the five previous water plan updates by: (1) estimating environmental water needs separately and accounting for these needs along with urban and agricultural water demands; (2) presenting water demand management methods as additional means of meeting water needs; and (3) presenting separate water balance scenarios for average and drought conditions.

This was the first of the Bulletin 160 series to incorporate an Advisory Committee of representatives of interested parties. The base year for analysis was 1990, and 2020 was the planning horizon.

The California Water Plan Update: Bulletin 160-98 (1998)

In response to public comments on the previous Bulletin 160, the 1998 issue evaluated water management options that could improve California's water supply reliability. By 1995, locally developed water supplies represented 70 percent of California's total developed water supplies. Water management options being planned by local agencies form the building blocks for evaluations performed for each of the State's ten hydrologic regions. Potential local options were integrated with options of a statewide scope, such as the CALFED Bay-Delta Program, to create a statewide evaluation. Bulletin 160-98 estimated a 1.6 million acre-feet water shortage in average years at the 1995 level of development, and a 5.1 maf shortage in drought years.